### Summary

The Virginia Tech Foundation (VTF) applied to the Broadband Technology Opportunities Program (BTOP) for a grant to install approximately 85 miles of new fiber optic cable, as part of the middle mile expansion for southern Virginia. The project will allow for high-speed internet service to currently unserved and underserved populations in the project area. The new network will be a hybrid of aerial and buried fiber installed in the public rights-of-way (ROWs) along the proposed route. The proposed action passes through five counties in southwest Virginia, and is referred to as the Virginia Tech to Bedford Broadband Project (Project).

The National Telecommunications and Information Administration (NTIA) awarded a grant for the Project to VTF, through BTOP, as part of the American Recovery and Reinvestment Act (ARRA). The funding must be obligated and the Project completed within three years. This timeline will comply with the laws and regulations governing the use of this ARRA grant funding.

BTOP supports the deployment of broadband infrastructure in unserved and underserved areas of the United States and its Territories. As a condition of receiving BTOP grant funding, recipients must comply with all relevant Federal legislation, including the National Environmental Policy Act of 1969 (NEPA). Specifically, NEPA limits the types of actions that the grantee can initiate prior to completing required environmental reviews. Some actions may be categorically excluded from further NEPA analyses based on the specific types and scope of work to be conducted. For projects that are not categorically excluded from further environmental review, the grant recipient must prepare an Environmental Assessment (EA) that meets the requirements of NEPA. After a sufficiency review, NTIA may adopt the EA, use it as the basis for finding that the project will not have a significant impact on the environment, and issue a finding of no significant impact (FONSI). Following such a finding, the BTOP grant recipient may then begin construction or other activities identified in the EA as the preferred alternative, in accordance with any special protocols or identified environmental protection measures.

VTF completed an EA for this Project in April 2011. NTIA reviewed the EA, determined it is sufficient, and adopted it as part of the development of this FONSI.

### The Project includes:

- Installing an approximately 85-mile hybrid broadband network of aerial and buried fiber through five counties in southwest Virginia, in existing roadway ROWs;
- Installing almost the entire route underground, via vibratory plow or directional boring, except specific segments as noted below;
- Installing specific segments aerially on existing utility poles, including a 4,900 foot section thru New Castle; a 1,000 foot section thru Fincastle; and a 6,800 foot section thru Troutville;

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over streams where necessary; and a 3,000 foot section through National Forest land near New Castle; and

• Installing three permanent interconnection points (huts) along the fiber route.

Based on a review of the analysis in the EA, NTIA has determined that the Project, implemented in accordance with the preferred alternative, and incorporating best management practices (BMPs) and protective measures identified in the EA, will not result in any significant environmental impacts. Therefore, the preparation of an EIS is not required. The basis for this determination is described in this FONSI.

Additional information and copies of the Executive Summary of the EA and FONSI are available to all interested persons and the public through the BTOP website (www2.ntia.doc.gov/) and the following contact:

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### **Purpose and Need**

The Project is part of the middle-mile expansion for southern Virginia, and will extend a fiber optic network to unserved and underserved areas, with emphasis on connecting the Virginia Tech main campus in Blacksburg to the Virginia Tech Carilion School of Medicine and Research Institute in Roanoke. The Virginia Tech to Bedford portion covers approximately eighty-five miles through five counties in southern Virginia. The Project is needed because it will deploy fiber in areas where, to date, it has not been economically feasible to install telecommunications infrastructure. The Project will provide middle mile fiber-optic for service providers to extend access to end users.

### **Project Description**

This Project is located in the Counties of Bedford, Botetourt, Craig, Giles, and Montgomery, Virginia. The fiber optic line is planned to be placed on Virginia Department of Transportation (VDOT), local municipality, and utility ROWs. Installation will primarily consist of burying the fiber in the ROW along the proposed route. From Montvale to Fincastle, the installation will

vary as to the side of the road; from Fincastle to New Castle, the installation will occur on the north side of the road; from New Castle to Newport, installation will occur on the north side of Route 42; and from Newport to Blacksburg, the installation will occur on the median of Highway 460. Portions of the route will be installed aerially, including a 4,900-foot section through New Castle, a 1,000-foot section through Fincastle, and a 6,800-foot section through Troutville. Aerial installation also occurs over streams where necessary. The installation thru the National Forest will be buried, except a 3,000-foot section near New Castle.

Land use in the project corridor is mostly forested and open space. Industrial and commercial areas are concentrated along Route 460 and Alternate 220 from Montvale to Cloverdale and near the towns of Fincastle, New Castle, Newport, and Blacksburg. Residential areas are located along the entire corridor with concentrations near towns. Agricultural uses are also prevalent along the corridor.

Buried installation will be performed by the use of a vibratory plow, a tractor-like machine with a placing attachment on the rear. Vibratory plowing is a trenchless method of installing buried, below ground cables. It is a multi-stage process consisting of a vibrating plow (blade) equipped with a trailing guide (chute), which feeds the cable into the ground continuously along a predetermined path and at a pre-set depth as the plow moves forward. The plowing attachment consists of a hydraulically controlled blade approximately 36-inch long that can be depth adjusted. The blade, once inserted into the ground at the desired depth, is mechanically vibrated to assist in the plowing operation as the blade is pulled thru the ground. The visible track of the plowing operation is approximately 6-inch wide, with little ground disturbance, and is barely noticeable once the disturbed ground is retraced over the track with a backhoe or vehicle tire. A vibratory plow tractor may have rubber tires or rubber tracks, depending on type.

Directional boring will be used when there is a need to cross under roads, streams, or other obstacles with minimum digging or ground disturbances. Directional boring machines come in a variety of sizes depending on the size and length of the desired bore. These machines have a directionally steerable boring head attached to a flexible, hollow, composite shaft (rod) that can be extended by screwing additional sections together. The machine uses water mixed with nontoxic bentonite drilling fluid pumped thru these hollow rods to the head and a rotating boring action of the rod and head to facilitate the boring process. There is normally a need to dig a "starter" hole and a "recovery" hole (approximately 24-inch wide by 24-inch deep) to start the bore head and to recover the bore head at the end of the bore. These holes are backfilled once the bore is complete. Any drilling fluid residue that accumulates in the starter hole during the process is suctioned into a recovery tank and disposed of properly.

Aerial cable installation requires a diesel or gas powered line/bucket truck and a manually operated cable spinner. The bucket truck provides access to the poles whereby a lineman installs a galvanized attachment bracket to the utility pole and also attaches a ¼-inch galvanized steel strand in the bracket from pole to pole. The cable lasher equipment is a 24-inch by 12-inch stainless steel cylinder that is pulled along the pre-installed strand and uses a 0.045-inch diameter

aluminum wire to attach the cable to the steel strand. In areas where the existing pole lines are not accessible from the public ROW, this process will be completed by manually climbing the poles, placing the strand, and pulling the lasher along the strand.

Three permanent interconnection points (huts) will be installed along the fiber route: one at the Eastpark Industrial Park on Eastpark Drive in Botetourt County; one at the intersection of Market Street (Rt. 615) and Court Street in New Castle; and one in an existing structure at the Pembroke Telephone Co-op Central Office at 562 Bluegrass Trail in Newport. The Eastpark and Newport huts will be placed on a parcel of land approximately 30 feet by 30 feet. The sites will be cleared of any trees, brush, or undergrowth and a concrete pad approximately 8-inch thick will be poured in place. A 15-foot long gravel driveway will be constructed for access to the sites, which are adjacent to public ROWs. The prefabricated concrete buildings are 12-foot by 20-foot, have two entry doors, pre-installed wiring, and pre-installed metal racks for mounting equipment. These buildings will be equipped with 200 amp, single-phase power supplies, dual high volume air-conditioning systems, and an emergency generator backup.

#### **Alternatives**

The EA includes an analysis of the alternatives for implementing the Project to meet the purpose and need. NTIA also requires that an EA include a discussion of the no action alternative. The following summarizes the alternatives analyzed in the EA.

Hybrid Fiber Installation (Preferred Alternative). As noted in the Project Description, this effort will include installation of approximately 85 miles of fiber optic cable. The new cable will be primarily buried underground within existing ROWs, with several portions installed aerially on existing poles. Three permanent interconnection points (huts) also will be installed along the fiber route.

No Action Alternative. No action was also considered. This alternative represents conditions as they currently exist in southwest Virginia. Under the no action alternative, new fiber middle-mile infrastructure would not be constructed. Many rural communities would continue to be unserved or underserved with respect to broadband internet access. Additionally, broadband services would not be provided to Community Anchor Institutions (CAIs) in the Project area. The EA examined this alternative as the baseline for evaluating impacts relative to other alternatives being considered.

Alternatives Considered But Not Carried Forward. VTF considered four other alternatives which were not carried forward for full analysis, including: (1) a different route, (2) use of wireless technology, (3) all aerial installation, and (4) all underground installation. The different route was eliminated from consideration because it was longer. The different route was to follow Blacksburg Road (Route 630) from Fincastle west to west on Catawba Road (Route 779), then north on Catawba Valley Drive (Route 311) to New Castle. This portion of the route was replaced by Routes 606 and 615 from Fincastle to New Castle. The different portion of the route

would have been approximately thirty-one miles, while the replacement section of preferred route is eighteen miles – a reduction of construction impact size of thirteen miles.

Another alternative eliminated was wireless technology. This option would require the construction of towers throughout the Project area, which would have aesthetic concerns and been more costly. In addition, wireless towers have a limited coverage area, especially in the mountainous terrain of southwestern Virginia. Adverse weather conditions also have the potential to disrupt wireless service. In addition, wireless technology would not support the amount of bandwidth needed by the middle mile network, and wireless access has a higher investment cost per customer for equipment compared to the proposed fiber access.

Installing the fiber optic line entirely aerially would require additional utility pole installation in areas where poles do not currently exist. This would be more costly and negatively impact the existing viewsheds of areas without current overhead utility lines. Installing the fiber optic line entirely underground would eliminate the flexibility to use aerial installation when needed to avoid stream disturbance. Areas where buried installation would either not be feasible or where aerial installation is preferred by the regulatory agencies include stream crossings with shallow bedrock and other site constraints. There are potential conflicts in areas with other existing underground utilities and densely developed areas such as towns with sidewalks.

### **Findings and Conclusions**

The EA analyzed existing conditions and environmental consequences of the preferred alternative and the no action alternative in 11 major resource areas: Noise, Air Quality, Geology and Soils, Water Resources, Biological Resources, Historic and Cultural Resources, Aesthetic and Visual Resources, Land Use, Infrastructure, Socioeconomic Resources, and Human Health and Safety.

### Noise

The Project will cause temporary noise from construction equipment and transportation vehicles for workers and supplies. Presently, traffic noise exists from the roadways adjacent to the route; the installation would increase noise slightly during construction. Some noise disturbance would be expected from the machinery involved with the installation in areas with less traveled roads, including temporary disturbance to nearby residences. However, this activity is expected to be consistent with other utility maintenance noise levels. After installation is complete, no additional noise from the operation of the fiber optic line is expected. Based on these considerations, no significant impacts on noise are expected to occur as a result of Project implementation.

### Air Quality

Potential impacts to air quality associated with this Project will be limited to the construction period. The Project will contribute to emissions in the region from installation-related vehicles and equipment during the installation phase. Fugitive dust may also be produced in areas where

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ground disturbance would occur. Diesel exhaust would be similar to the current conditions of traffic emissions since the preferred route is along existing roadways. During times of limited roadway access, automobile traffic may be required to idle, causing a short-term increase in emissions. Best management practices should be implemented during installation of the fiber optic line to minimize equipment and vehicular emissions and dust. Maintaining equipment in good operating order, cleaning equipment to avoid tracking sediment onto roadways, and reseeding disturbed areas as soon as possible will reduce dust and maintain air quality. Based on these considerations, no significant impacts on air quality are expected to occur as a result of Project implementation.

### Geology and Soils

The Project will disturb soil and possibly underlying bedrock on the portions of the route that require buried installation of the fiber optic line. The installation of buried portions is planned by vibratory plow in previously disturbed soils in the road ROWs. The use of existing utility poles for overhead installation will eliminate the need to disturb soil for utility pole installation. Best management practices to reduce soil erosion will be implemented during underground installation and construction of the three utility huts. Mid-Atlantic Broadband Corporation (MBC) is covered under the Virginia Telecommunications Industry Association (VTIA) General Erosion and Sediment Control Specifications 2010, approved by the Department of Conservation and Recreation, concerning erosion and sediment control. A project-specific erosion and sediment control plan will be developed based on the approved specifications. BMPS to reduce soil erosion include:

- Name a responsible land disturber (RLD)
- Clear ROW of vegetation with a mechanical rotary cutter and keep root masses intact
- Open trenches in short enough sections to be backfilled same day
- Backfill open trenches as soon as possible
- Compact earth over trench and mound earth to compensate for future settlement
- Restore area to pre-construction surface, using mulch and native seed mixes or road shoulder aggregate as necessary.

The VDCR Department of Natural Heritage (DHR) review identified several areas of the proposed route that contain or are near sensitive karst features and caves, including the Fincastle Cave. These include sinkholes, caves, disappearing streams, and large springs. The DHR requested that if karst features are discovered visually during project implementation, VTF will contact VDCR regarding ways to minimize adverse impacts to such features, such as runoff that can cause surface collapse and contaminate the underground environment. Based on these considerations, and with implementation of the BMPs described above, no significant impacts on geology and soils are expected to occur as a result of Project implementation.

### Water Resources

The Project will have the potential to affect water resources along the proposed route. There are several stream crossings along the route that will be crossed either on overhead utility lines (if

available) or by direct bore under the stream. Installation activities have the potential to affect surface water through soil erosion and petroleum leaks from heavy equipment involved with installation. As noted in the previous section, Mid-Atlantic Broadband Corporation is covered under the Virginia Telecommunications Industry Association (VTIA) General Erosion and Sediment Control Specifications 2010, approved by the Department of Conservation and Recreation, concerning erosion and sediment control. A project-specific erosion and sediment control plan will be developed based on the approved specifications. The use of the BMPs, outlined above, together with general management practices to reduce soil erosion and keeping equipment in good working order will reduce the impact of these effects. Additional BMPs to reduce potential impacts to surface and groundwater from directional boring include:

- Designate a level area away from stream to temporarily store excavated material.
- Protect perimeter of stockpile with a silt fence.
- Replace excavated material and compact.
- Restore site to pre-construction contours.
- Maintain existing vegetation between stream and excavation.
- Cleaning equipment to avoid tracking soil on roadway.

A permit from the Virginia Marine Resources Commission (VMRC) was issued on February 24, 2011, for crossings of streams with a drainage area greater than five square miles. The VMRC permit covers eight streams crossings that exceed that area, including: Catawba Creek at Route 606, North Fork of Catawba Creek at Route 606, Craig Creek at Route 606, Mill Creek at Route 615, Barbour Creek at Route 615, Johns Creek at Route 615, and two crossings of Sinking Creek on Route 42.

A desktop review of the National Wetland Inventory (NWI) from U.S. Fish and Wildlife Service (USFWS) shows no wetlands along the proposed route. However, the Proposed Fiber Optic Line Route Map shows NWI wetlands near the proposed route. A field check by staff and contractor personnel will identify any potential wetlands prior to installation. Wetlands encountered at boring sites will result in a new boring location outside of the wetland. Wetlands encountered at trenching areas will be reseeded with wetland seed mix. Based on these considerations, and with implementation of the BMPs described above, no significant impacts on water resources are expected to occur as a result of Project implementation.

### **Biological Resources**

The Project will cause minimal impact to habitat, wildlife, and vegetation since the proposed route is on previously disturbed ROW. Additional noise from the construction, which could disturb wildlife, would be temporary and minimal, and located in areas where traffic noise is already present. Segments of aerial installation will occur on existing aboveground utility poles and therefore will not contribute to additional habitat destruction from new utility pole installation. Existing vegetation on the ROW is regrowth from natural conditions and may include invasive species, so disturbance to vegetation will be minimal. Adverse impacts of installation would be temporary during the construction phase and subsequent regrowth of vegetation. Impact on aquatic habitat from soil erosion near and around streams will be

minimized by the use of BMPs under the erosion and sediment control plan, utilizing directional boring installation, or by aerial installation over streams. Fiber optic cable does not carry current like electrical lines, so there is no danger of electrocution to wildlife from exposure to aerial installation. Portions of the corridor disturbed in the public ROW for underground installation will be immediately filled and restored, reducing the likelihood of adverse impacts to wildlife.

According to the VDCR DNH, the proposed project will not affect any state listed plants or insects. The five aquatic species of concern listed by the Division of Natural Heritage and the federally endangered James spinymussel, found in Catawba Creek, Craig Creek, and Johns Creek, will be protected by the USFWS recommendation to install the fiber optic line aerially over those creeks. The five aquatic species of concern listed by the Division of Natural Heritage and the federally endangered James spinymussel, found in Catawba Creek, Craig Creek and Johns Creek, will be protected by the USFWS recommendation to install the fiber optic line aerially over those creek. The federally endangered smooth coneflower will be protected by installing in mowed rights of way and using directional boring in areas of potential habitat. Based on these considerations, and with implementation of the BMPs and protection measures described above, no significant impacts on biological resources are expected to occur because of Project implementation.

### Historic and Cultural Resources

In March 2010, NTIA initiated correspondence with the Virginia Department of Historical Resources (SHPO) and sent a detailed project description and maps. In a letter dated June 15, 2010, Earth Environmental and Civil, Inc., on behalf of VTF, sent a follow-up letter to the SHPO together with a *Project Review Application Form*, requesting a review of the Project. In subsequent e-mail communications on July 13 and July 20, 2010, the SHPO confirmed receipt of the project information and requested more detailed information about which segments would be buried and which segments would be installed aerially. VDHR then recommended, based on their review of the project description, maps, and archival research, that an assessment of the project was needed based on final engineering plans. VTF and Earth Environmental and Civil, Inc., engaged Browning and Associates, Ltd. to complete a cultural resources assessment for the route. The cultural resources assessment was submitted to VDHR in early 2011 with the findings that as long as proposed disturbance is located within 15 feet of the edge of pavement on 2-lane roads, and 25 feet on divided median roads, there should be no impacts on identified cultural resources. VDHR concurred with the findings of the cultural resources assessment, and issued a finding of no adverse effect in a letter dated April 8, 2011.

Through the Tower Construction Notification System (TCNS), NTIA provided Project details to seven tribes interested in the Project's geographical location (southwestern Virginia). Two tribes responded that they have no interest in the project site. VTF received direct responses from five tribes that were notified of the Project, and followed up with all five tribes by providing the additional information requested. After review of the additional information, three of the five tribes responded that they had no further interest in the project, and the remaining two tribes have yet to respond to the additional information.

All construction will be restricted to previously disturbed areas. If any cultural material is discovered during construction, the SHPO will be notified immediately and all activities halted until a qualified archaeologist assesses the cultural materials. If any human skeletal remains or protected Native objects are uncovered during construction, construction will stop immediately, and all consulting parties will be contacted. Based on these consultations, guidance from the regulatory agencies, and additional protective measures to be implemented, the Project is not expected to have significant adverse impacts on historic and cultural resources.

### Aesthetic and Visual Resources

The area of the proposed fiber route from Montvale to Blacksburg contains numerous aesthetic and visual resources of value to both area residents and tourists. The installation of the fiber optic line may cause a temporary disturbance to the aesthetic quality during construction and regrowth of vegetation. Areas of buried line will not impact visual resources after the installation is complete, and overhead installation will occur only where existing utility lines already impact the view. The interconnection huts are located in areas of existing development where additional construction is not expected to further degrade the view. Based on these considerations, no significant impacts on aesthetic and visual resources are expected to occur as a result of Project implementation.

#### Land Use

Installation of the fiber optic line on existing utility poles and underground in existing ROWs would not impact land use. VTF and MBC are expected to amend a current Memorandum of Understanding (MOU) with VDOT regarding the use of the public ROW for installation of the fiber optic line. In areas of limited access ROW, MBC must be granted an exception by entering into a resource sharing agreement with VDOT. In addition, portions of the proposed fiber route pass through the George Washington and Jefferson National Forests. According to correspondence with the U.S. Forest Service, items of concern include developing an Erosion Control Plan to protect sediment from reaching streams in the forestlands, the type of vegetation to be used after installation of buried sections, and protecting the Appalachian Trail crossings from erosion. The permit process with the U.S. Forest Service has been initiated by MBC, and the permit will be completed before any construction on National Forest land is initiated.

The construction of the three huts will each require acquisition of a 30 by 30-foot parcel of land. The site at Eastpark Drive is near an industrial park, a fire station, and a convenience store, so the addition of a small prefabricated building should not affect land use. The New Castle site is located at the corner of Market and Main Streets in the town of New Castle near other commercial and business properties. The Newport site is located at the site of the Pembroke Telephone Co-op Office where telecommunication structures already exist. Based on these considerations, no significant impacts on land use are expected to occur as a result of Project implementation.

### Infrastructure

The Project will add high-speed internet access to a currently underserved area of Virginia. This will allow for greater communication and information access to the area. The primary and secondary highways along the proposed fiber route should be sufficient for construction equipment access. Portions of the roadway may be temporarily limited during construction activities. Roadway activities will be adequately marked during construction to alert motorists. Construction work during periods of fair weather would be preferred, especially on sections of secondary roads in mountainous areas (Routes 606 and 615). The installation of the fiber optic line will occur near other utility lines, including telephone, cable, electrical, and possible water and sewer lines. Proposed construction activities will avoid damage to these lines and pipes placed in the ROW. Existing utility lines will be marked by Miss Utility of Virginia prior to subsurface digging or excavation. Based on these considerations, no significant impacts on infrastructure are expected to occur as a result of Project implementation.

#### Socioeconomic Resources

This area of Virginia is home to minority and low-income populations and installing the fiber optic line to provide high-speed internet connectivity will provide socioeconomic benefit to the project area with minimal adverse impact to those populations. The construction and maintenance of the fiber optic line will directly provide jobs. It also will provide the backbone for last mile fiber optic line to connect public schools and allow greater educational opportunities for K-12 schools. Distance learning opportunities for residents will increase, leading to more education and the possibility of better jobs. High-speed internet access could help attract more businesses to the area, also indirectly leading to job creation. The fiber optic line will be installed in the public ROW, eliminating the need to take property from minority and low income populations. The huts will be located in commercial and industrial areas, not impacting private landowners or agricultural land. Based on these considerations, no significant impacts on socioeconomic resources are expected to occur as a result of Project implementation.

### Human Health and Safety

The Project has the potential to impact human health and safety during the construction phase, specifically to the construction workers who will implement the Project. To minimize any inherent risks, site workers will wear appropriate personal protection equipment such as hearing protection, hard hats, and work apparel, and will take proper precautions while working to avoid or minimize injury. Work will follow all local, state, and federal requirements for safety. Potential public safety risks associated with the proposed work along open roadways, such as traffic accidents, can be reduced by proper adherence to traffic control regulations (the Manual on Uniform Traffic Control Devices). A project-specific health and safety plan will be developed to address work practices. There are no listed hazardous waste sites along the proposed route; however, soil and water contaminated areas could be encountered during excavation. Special precaution should be taken when working on utility poles by properly trained personnel. The use of a vibratory plow for subsurface installation will minimize safety concerns associated with an open trench. The installation of the line will create some construction waste along the line and at the three huts. It is not expected to be hazardous waste

and steps will be taken to minimize the amount of waste created. All waste will be disposed of in proper waste management facilities. No adverse health impact to people near the installation route in residences or commercial locations is expected. Based on these considerations, no significant impacts on human health and safety are expected to occur as a result of Project implementation.

### **Cumulative Impacts**

The Project corridor is along existing roadways and other utility lines. Upkeep and improvements of the road surface and maintenance of utility lines may be needed during the installation of the fiber optic line. There are no scheduled projects on the VDOT Six Year Plan or by local municipalities along the proposed route at this time. At the time work is to begin, VDOT and county governments will be contacted in order to avoid any potential, unforeseen conflicts by working on the same section of roadway. There will be negligible negative cumulative impacts from the presence of the fiber optic line on previously discussed resource areas. Impacts on noise, air quality, soil, water, biological resources, and human health and safety are temporary and due to construction and installation activities. The use of BMPs during installation will further reduce adverse impacts to soil, water, and wildlife habitat. The location of the installation corridor in previously disturbed areas of utility and road ROWs reduces the impact on historical resources and visual resources.

A possible, minor, negative impact on infrastructure, cumulatively, is that the installation of the fiber optic cable will leave less space for other lines to be installed in the future. A possible cumulative impact on land use is that access to high-speed internet could cause more economic and developmental growth in rural areas. However, all counties included in the project corridor have zoning and long-term plans, and any future development would have to align with such plans. The Project will affect socioeconomic resources in a positive way by providing high-speed internet access to underserved areas of rural Virginia. Education and commercial opportunities will be greater and allow for job growth in the area. Based on these considerations, no significant cumulative impacts are expected to occur as a result of Project implementation.

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### **Decision**

Based on the above analysis, NTIA concludes that constructing and operating the Project as defined by the preferred alternative, identified BMPs, and protective measures, will not require additional mitigation. A separate mitigation plan is not required for the Project. The analyses indicate that the proposed action is not a major Federal action that will significantly affect the quality of the human environment. NTIA has determined that preparation of an EIS is not required.

Issued:

Wayne Ritchie

Chief Administrative Officer

Office of Telecommunications and Information Applications National Telecommunications and Information Administration